

***R & W / ENGINEERS, P.C.***  
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May 31, 2018

Ms. Shahla Tehrani  
485 Bryant Avenue  
Roslyn Harbor, New York 11576

**Re: Property condition assessment  
485 Bryant Avenue, Roslyn Harbor**

Dear Ms. Tehrani:

I visited the referenced property on Friday, May 18, 2018 and performed an inspection of the existing timber retaining wall and waterfront structures. My findings are as follows:

1. The existing timber retaining wall is in a partial state of failure due to rotted members. The timber retaining wall is located adjacent to the existing rear patio and is comprised of 6x6 pressure treated railroad ties. A repair has been made toward the southern end of the wall which includes placement of railroad tie new timber in front of the older failed members. Posts have been placed in front of the new railroad ties to support same.

The failure of the retaining wall is due to age, as the majority of the members exhibit severe rot. The "repair" made is not considered a long term fix for the wall as it does not appear to be designed for the lateral loading imposed on the wall by the retained soil. In addition, the repair did not include a return into the soil on the south end of the wall and there is the potential for wash out of fill from behind the wall, which could compromise the patio.

R&W recommends that the entire wall be replaced with segmental block wall design. Timber cribbing would be less expensive but this area does not get sufficient sunlight and the timber members, even if pressure treated, would be subject to accelerated rot.

2. The existing timber steps and railing that lead to the waterfront are deteriorated and should be replaced as soon as possible. Many of the stair treads exhibit rot. Again, these features do not get much sunlight due to the extensive tree canopy. As such, we would recommend materials be introduced that are not subject to rot.
3. The existing waterfront features, including the two promenades, the stairs leading to same, and the pier, exhibit significant deterioration due to their age. In addition to the rot, borer infestation on the piles and typical weathering, the two promenade structures appear to have been damaged

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from recent storms. Both structures are displaced, as is visible from the timber pier. There is evidence of erosion of the embankment behind both of the promenade structures, which has led to displacement of the supporting timber members.

Regarding the timber pilings that support the pier, there is evidence of the marine borer *limnoria tripunctata*, which feeds on wood fibers, typically in the tidal zone, resulting in an hourglass shape of the affected pile.

The waterfront structures are in an advanced state of deterioration and should be reconstructed as soon as possible. The railing along the pier is only on one side. Any rebuilding plan should include railing on both side for safety.

I took photographs of the damage and can present same upon request.

Should you have any questions regarding this report or require any additional information, please contact our office.

Very truly yours,  
*R & W / Engineers, P.C.*

*Michael L. Williams*

Michael L. Williams, P.E.  
Principal